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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,987	01/04/2002	Murali Rajagopalan	B01-30	7852

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EXAMINER

BUTTNER, DAVID J

ART UNIT PAPER NUMBER

1712

DATE MAILED: 11/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/037,987

Applicant(s)

RAJAGOPALAN ET AL.

Examiner

David Buttner

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-34 is/are pending in the application.
- 4a) Of the above claim(s) 2-9, 14 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 10, 11, 13, 16-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 1712

Claims 1,10,11,13 and 16-34 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 requires a "base rubber and at least one matrix material". Does polybutadiene meet both limitations simultaneously? Does a second non-polybutadiene need be present? Must the rubber not form the matrix?

Claims 1, 10, 13, 16-20 and 28-34 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the J11244419 Patent.

The reference is believed to exemplify (page 7) multilayer golf balls having 0.4 micron ZnO in the inner core or alternatively in the outer core. The core can have a diameter of 36.7-42.1mm (paragraph 30). The cover can be polyurethane, ionomer etc (paragraph 32). The cover can have multiple layers and have a thickness of 0.5-2.5mm (paragraph 33). In the reference's multicovered ball, the inner cover would qualify as applicant's intermediate layer. The cover can have a shore D of 45-65 (paragraph 33) and the ball can have an overall compression of 2.6-3.8 mm under 100 kg (paragraph 35). This compression inherently corresponds to applicant's ATTI compression (see figure 7 correlation in Science and Golf IV). The amount of ZnO can be as low as 5 parts (paragraph 23).

Claims 21-27 rejected under 35 U.S.C. 103(a) as being unpatentable over J11244419.

Art Unit: 1712

The reference (paragraph 33) suggests the cover can be made of two or more layers. This suggests a three layer cover on a dual core. The innermost cover qualifies as applicant's intermediate layer. If the overall cover thickness is 0.5-2.5mm (0.02-0.10microns) then each of the individual three cover layers must be thinner. It would have been obvious to make each layer of equal thickness (0.007-0.033microns) and each within the 45-65 shore D hardness.

Claims 1, 10, 13, 16-21 and 28-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over the J11244419 Patent in view of WO 01/43832.

J'419 suggests polyurethane covers, but does not teach saturated polyurethanes. Saturated (ie nonaromatic) polyurethanes are more UV stable than aromatic polyurethanes (page 1 line 9 of WO 01/43832).

It would have been obvious to choose a saturated urethane for J '419's cover for superior UV stability.

Applicant's arguments filed 9/8/04 have been fully considered but they are not persuasive.

Applicant argues J'419 does not suggest the currently claimed core diameter or thin non-rubber intermediate layers.

This is not convincing. The reference's inner cover can be considered an intermediate layer. It is thin and can be ionomeric or a polyurethane. The designations of outer core, inner cover, mantle, intermediate layer etc. are a matter of choice. These designations merely necessitate the layer not be the center or outermost layer of the ball.

The Herbert '172 reference can no longer be relied upon to complement J'419, because he does not clearly teach the properties of a three cover layer structure.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Buttner whose telephone number is (571) 272-1084. The examiner can normally be reached on Weekdays from 10:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DAVID J. BUTTNER
PRIMARY EXAMINER

D. Buttner
November 4, 2004

David Buttner